

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): KWON, Dae-Heon et al.

Examiner: USTARIS, Joseph G.

Serial No.: 09/467,210

Group Art Unit: 2424

Filed: December 20, 1999

Docket: 678-405 (P8985)

Dated: January 5, 2009

For: **PORTABLE TELEVISION (TV) PHONE AND METHOD FOR CONTROLLING  
OPERATION THEREOF**

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313

**TRANSMITTAL OF APPELLANTS' BRIEF ON APPEAL**

Sir:

Enclosed please find APPELLANTS' BRIEF.

Also enclosed is a credit card payment in the amount of \$540.00 to cover the appeal fee.

If the enclosed credit card payment is insufficient for any reason or becomes detached, please charge the required fee under 37 C.F.R. §1.17 to Deposit Account No. 50-4053. Also, in the event any additional extensions of time are required, please treat this paper as a petition to extend the time as required and charge Deposit Account No. 50-4053.

Respectfully submitted,



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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE  
BOARD OF PATENT APPEALS AND INTERFERENCES**

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**APPELLANTS' BRIEF ON APPEAL**

### REAL PARTY IN INTEREST

The real party in interest is Samsung Electronics Co, Ltd, the assignee of the subject application, having an office at 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea.

### RELATED APPEALS AND INTERFERENCES

To the best of Appellant's knowledge and belief, there are no currently pending related appeals, interferences or judicial proceedings.<sup>1</sup>

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<sup>1</sup> A Pre-Appeal Request for Review was filed on July 17, 2008. A Panel Decision issued on December 4, 2008 recommending that the appeal proceed to the Board of Patent Appeals and Interferences.

### STATUS OF CLAIMS

Original Claims 1-7 were filed on December 20, 1999. Claims 1 and 3-7 were amended in an Amendment filed September 30, 2003. Claim 1 was amended in a Request for Continued Examination (RCE) filed November 8, 2004. Claim 1 was amended and Claims 4-7 were cancelled in an RCE filed December 12, 2005. Claim 1 was amended in an RCE filed February 5, 2007. Thus, Claims 1-3 are pending in the Appeal. Claim 1 is in independent form. For the purposes of this Appeal, Claims 1-3 stand or fall together.

### STATUS OF AMENDMENTS

Thus, the Appendix to this Appeal Brief includes Claims 1 and 3, of which the status is indicated as “Previously Presented”; Claim 2, of which the status is indicated as “Original”; and Claims 4-7, of which the status is indicated as “Cancelled”.

## SUMMARY OF CLAIMED SUBJECT MATTER

The invention as recited in Claim 1 relates to a TV phone in which a television and a portable cellular phone are integrally combined. The TV phone includes first, second and third call alarm modes. (Specification at page 9, lines 19-22, FIG. 2.)<sup>2</sup> The TV phone also includes a TV module for receiving and demodulating a desired TV channel signal among radio-frequency electromagnetic signals received in response to an input of a tuning signal, when the TV module operates by supply of a power supply voltage, to generate a composite video signal, a composite synchronizing signal and a composite audio signal. (Specification at page 7, line 8 – page 8, line 17, FIGs. 1 and 2.) The TV phone further includes a Mobile Station Radio Frequency Unit (MRFU) for demodulating a signal indicative of an incoming call received through a forward channel, forming an audio conversion channel among the received radio-frequency electromagnetic signals to output the demodulated signal, and modulating and transmitting a signal in a reverse channel. (Specification at page 12, line 22 – page 13, line 21, FIGs. 1 and 2.) The TV phone still further includes a TV control section for supplying the tuning signal corresponding to a channel selection command signal to the TV module, synchronizing On Screen Display (OSD) data corresponding to display control data and display data with the composite synchronizing signal to output the synchronized signal as a video signal. (Specification at page 8, line 18 – page 19, line 15, FIGs. 1 and 2.) The TV phone also includes a Mobile Station Processor (MSP) for establishing a phone or TV mode in response to an input command, generating the channel selection command signal stored in a predetermined memory area by setting the TV mode, and generating an alarm signaling a reception of the incoming call output from the MRFU according to at least one of the first, the second, and the third incoming call

alarm modes. (Specification at page 10, lines 10-20, page 14, line 13 – page 15, line 13, FIGs. 1 and 2.) In the TV phone, the first incoming call alarm mode comprises interrupting a power supply voltage supplied to the TV module and automatically switching from the TV mode to the phone mode, the second incoming call alarm mode comprises switching off and on, at a predetermined interval, the audio signal output from the TV module, and the third incoming call alarm mode comprises displaying one of an incoming call character message and a preset graphic message, at a specific region or an entire portion of the TV image viewing screen in accordance with controlling the TV control unit, and processing audio data output from the MRFU to output the processed audio data signal while supplying audio data to the MRFU. (Specification at page 9, line 19 – page 10, line 8, FIGs. 1 and 2.) The TV phone still yet further includes a display unit for synchronizing the composite video signal from the TV module and the video signal from the TV control section with the composite synchronizing signal and displaying the synchronized composite video signal and the video signal on an image viewing screen. (Specification at page 7, lines 8-15, FIGs. 1 and 2.)

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<sup>2</sup> Although a citation for each feature of the claims is provided herein, Appellants do not concede the fact that support may be found elsewhere in the written description.



GROUND FOR REJECTION TO BE REVIEWED ON APPEAL

Whether Claims 1-3 under 35 U.S.C. §103(a) are rendered obvious over U.S. Patent 6,243,596 (Kikinis) in view of U.S. Patent 5,005,013 (Tsukamoto), U.S. Patent 6,141,058 (Lagoni), U.S. Patent 4,873,712 (Porco), U.S. Patent 4,465,902 (Zato) and U.S. Patent 5,835,578 (Reyes).

## ARGUMENT

### 1. Independent Claim 1 is patentable over Kikinis in view of Tsukamoto, Lagoni, Porco, Zato and Reyes

Independent Claim 1 was said to be rendered obvious by Kikinis in view of Tsukamoto, Lagoni, Porco, Zato and Reyes.<sup>3</sup>

The invention as recited in Claim 1 relates to a TV phone in which a television and a portable cellular phone are integrally combined. The TV phone includes first, second and third call alarm modes. The TV phone also includes a TV module for receiving and demodulating a desired TV channel signal among radio-frequency electromagnetic signals received in response to an input of a tuning signal, when the TV module operates by supply of a power supply voltage, to generate a composite video signal, a composite synchronizing signal and a composite audio signal. The TV phone further includes a Mobile Station Radio Frequency Unit (MRFU) for demodulating a signal indicative of an incoming call received through a forward channel, forming an audio conversion channel among the received radio-frequency electromagnetic signals to output the demodulated signal, and modulating and transmitting a signal in a reverse channel. The TV phone still further includes a TV control section for supplying the tuning signal corresponding to a channel selection command signal to the TV module, synchronizing On Screen Display (OSD) data corresponding to display control data and display data with the composite synchronizing signal to output the synchronized signal as a video signal. The TV phone also includes a Mobile Station Processor (MSP) for establishing a phone or TV mode in response to an input command, generating the channel selection command signal stored in a predetermined memory area by setting the TV mode,

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<sup>3</sup> See Office Action dated April 22, 2008 at pages 4-11.

and generating an alarm signaling a reception of the incoming call output from the MRFU according to at least one of the first, the second, and the third incoming call alarm modes. In the TV phone, the first incoming call alarm mode comprises interrupting a power supply voltage supplied to the TV module and automatically switching from the TV mode to the phone mode, the second incoming call alarm mode comprises switching off and on, at a predetermined interval, the audio signal output from the TV module, and the third incoming call alarm mode comprises displaying one of an incoming call character message and a preset graphic message, at a specific region or an entire portion of the TV image viewing screen in accordance with controlling the TV control unit, and processing audio data output from the MRFU to output the processed audio data signal while supplying audio data to the MRFU. The TV phone still yet further includes a display unit for synchronizing the composite video signal from the TV module and the video signal from the TV control section with the composite synchronizing signal and displaying the synchronized composite video signal and the video signal on an image viewing screen.

Kikinis discloses a method and apparatus for modifying and integrating a cellular phone with the capability to access and browse the Internet.<sup>4</sup>

Tsukamoto discloses a pager with a display function.<sup>5</sup>

Lagoni discloses a television receiver having a user-editable telephone system caller-ID feature.<sup>6</sup>

Porco discloses a telephone controlled interrupter circuit.<sup>7</sup>

Zato discloses a digital space phone system.<sup>8</sup>

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<sup>4</sup> See Kikinis at title and abstract.

<sup>5</sup> See Tsukamoto at title and abstract.

<sup>6</sup> See Lagoni at title and abstract.

Reyes discloses a modem with ring detection/modem processing capability.<sup>9</sup>

2A. The combination of Kikinis, Tsukamoto, Lagoni, Porco, Zato and Reyes does not teach or disclose at least a first incoming call alarm mode interrupting a power supply voltage supplied to the TV module and automatically switching from the TV mode to the phone mode, as recited in Claim 1, and therefore Kikinis in view of Tsukamoto, Lagoni, Porco, Zato and Reyes cannot render Claim 1 unpatentable

Claim 1 of the present application recites a first incoming call alarm mode interrupting a power supply voltage supplied to a TV module and automatically switching from a TV mode to a phone mode. Two distinct processes are recited in this feature of Claim 1: (1) interrupting a power supply voltage supplied to a TV module, and (2) automatically switching from a TV mode to a phone mode.

The Examiner alleges that Porco discloses these features of the first incoming call alarm mode interrupting a power supply voltage supplied to the TV module and automatically switching from the TV mode to the phone mode recited in Claim 1 of the present application.<sup>10</sup>

Col. 3, line 44 to Col. 5, line 27 of Porco discloses an electrical system that provides power to two separate devices, i.e. a vehicular telephone and an audio system. More particularly, the electrical system supplies power to the vehicular telephone when the telephone is in use, and supplies power to the audio system when the telephone is in a standby state. Porco discloses interrupting the power supply to the audio system when receiving/sending operations are performed in the vehicular

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<sup>7</sup> See Porco at title and abstract.

<sup>8</sup> See Zato at title and abstract.

<sup>9</sup> See Reyes at title and abstract.

telephone while supplying power to the audio system and supplying power to the vehicular telephone. Porco discloses primarily supplying power when the vehicular telephone is operated between the two separate devices, i.e. the vehicular telephone for telephone function and the audio system for audio output. Porco only discloses interrupting a power supply.

Porco fails to teach or suggest a first incoming call alarm mode for both interrupting a power supply voltage supplied to the TV module and automatically switching a TV mode to a phone mode in a portable cellular phone having a phone mode and a TV mode, as recited in Claim 1 of the present application. Kikinis, Tsukamoto, Lagoni, Zato and Reyes do not cure the defects of Porco.

Based on at least the foregoing, Claim 1 is patentable over the combination of Kikinis in view of Tsukamoto, Lagoni, Porco, Zato and Reyes, and therefore the rejection of independent Claim 1 under §103(a) must be reversed.

2B. The combination of Kikinis, Tsukamoto, Lagoni, Porco, Zato and Reyes does not teach or disclose at least a second incoming call alarm mode switching off and on, at a predetermined interval, the audio signal output from the TV module, as defined in Claim 1, and therefore Kikinis in view of Tsukamoto, Lagoni, Porco, Zato and Reyes cannot render Claim 1 unpatentable

Claim 1 of the present application recites a second incoming call alarm mode switching off and on, at a predetermined interval, an audio signal output from a TV module. The audio output of the TV module is switched on and off to alert the user as per the second alarm mode.

The Examiner alleges that Zato discloses the second incoming call alarm mode switching off and on, at a predetermined interval, the audio signal output from the TV module recited in Claim 1

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<sup>10</sup> See Office Action dated April 22, 2008 at page 9.

of the present application.<sup>11</sup>

FIG. 1, Col. 3, lines 16-40 of Zato discloses a television receiver having a telephone capability. Switch 58 connects the normal television audio circuit 61 and the volume control 59, and then the normal TV audio signal input from the normal television audio circuit 61 is output to the speaker 60 through the volume control 59. If an incoming ring signal is supplied, the switch 58 cancels the connection of the normal television audio circuit 61 and the volume control 59, and connects the D/A converter 56 to the volume control 59, and then the tone generator signal input from the D/A converter 56 is output to the speaker 60 through the volume control 59. The television viewer is alerted to an incoming telephone call by an audible ring signal from the television speaker and by visual indicator.

As mentioned above, Zato only discloses that a television receiver disconnects the normal TV audio signal, connects the ringing signal alerting an incoming telephone call and outputs the ringing signal when the ringing signal is generated during the output of the normal TV audio signal.

Zato fails to disclose a second incoming call alarm mode switching off and on, at a predetermined interval, an audio signal output from a TV module.

Zato fails to teach or suggest a second incoming call alarm mode switching off and on, at a predetermined interval, the audio signal output from the TV module, as recited in Claim 1 of the present application. Kikinis, Tsukamoto, Lagoni, Porco and Reyes do not cure the defects of Zato.

Based on at least the foregoing, Claim 1 is patentable over the combination of Kikinis in view of Tsukamoto, Lagoni, Porco, Zato and Reyes, and therefore the rejection of independent Claim 1 under §103(a) must be reversed.

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<sup>11</sup> See Office Action dated April 22, 2008 at page 9.

2C. Independent Claim 1 is not rendered obvious by Kikinis in view of Tsukamoto, Lagoni, Porco, Zato and Reyes

The Examiner has failed to show that each and every element of Claim 1, and in as complete detail as is contained therein, are taught in or suggested by the prior art. The Examiner has failed to make out a prima facie case for an obviousness rejection, and thus Claim 1 is allowable.

3. Dependent Claims 2 and 3 are patentable over Kikinis in view of Tsukamoto, Lagoni, Porco, Zato and Reyes

Without conceding the patentability per se of dependent Claims 2 and 3, these claims are likewise believed to be allowable by virtue of at least their dependence on Claim 1.

### CONCLUSION

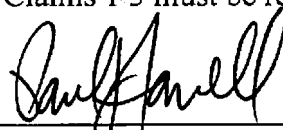
As the Examiner has failed to make out a prima facie case for an obviousness rejection, the rejection of Claims 1-3 must be reversed.

It is well settled that in order for a rejection under 35 U.S.C. §103(a) to be appropriate, the claimed invention must be shown to be obvious in view of the prior art as a whole. A claim may be found to be obvious if it is first shown that all of the recitations of a claim are taught in the prior art or are suggested by the prior art. In re Royka, 490 F.2d 981, 985, 180 U.S.P.Q. 580, 583 (C.C.P.A. 1974), cited in M.P.E.P. §2143.03. The Examiner has failed to show that all of the recitations of Claims 1-3 are taught or suggested by Kikinis in view of Tsukamoto, Lagoni, Porco, Zato and Reyes.

Accordingly, the Examiner has failed to make out a prima facie case for an obviousness rejection. Independent Claim 1 is not rendered unpatentable by Kikinis in view of Tsukamoto, Lagoni, Porco, Zato and Reyes. Therefore, the rejections of Claims 1-3 must be reversed.

Dated: January 5, 2009

By: \_\_\_\_\_



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## CLAIMS APPENDIX

1. (Previously Presented) A TV phone in which a television and a portable cellular phone are integrally combined, the TV phone comprising:

first, second and third call alarm modes;

a TV module for receiving and demodulating a desired TV channel signal among radio-frequency electromagnetic signals received in response to an input of a tuning signal, when the TV module operates by supply of a power supply voltage, to generate a composite video signal, a composite synchronizing signal and a composite audio signal;

a Mobile Station Radio Frequency Unit (MRFU) for demodulating a signal indicative of an incoming call received through a forward channel, forming an audio conversion channel among the received radio-frequency electromagnetic signals to output the demodulated signal, and modulating and transmitting a signal in a reverse channel;

a TV control section for supplying the tuning signal corresponding to a channel selection command signal to the TV module, synchronizing On Screen Display (OSD) data corresponding to display control data and display data with the composite synchronizing signal to output the synchronized signal as a video signal;

a Mobile Station Processor (MSP) for establishing a phone or TV mode in response to an input command, generating the channel selection command signal stored in a predetermined memory area by setting the TV mode, and generating an alarm signaling a reception of the incoming call output from the MRFU according to at least one of the first, the second, and the third incoming call alarm modes,

wherein the first incoming call alarm mode comprises interrupting a power supply voltage

supplied to the TV module and automatically switching from the TV mode to the phone mode, the second incoming call alarm mode comprises switching off and on, at a predetermined interval, the audio signal output from the TV module, and the third incoming call alarm mode comprises displaying one of an incoming call character message and a preset graphic message, at a specific region or an entire portion of the TV image viewing screen in accordance with controlling the TV control unit, and processing audio data output from the MRFU to output the processed audio data signal while supplying audio data to the MRFU; and

a display unit for synchronizing the composite video signal from the TV module and the video signal from the TV control section with the composite synchronizing signal and displaying the synchronized composite video signal and the video signal on an image viewing screen.

2. (Original) The TV phone recited in claim 1 further comprising a power switch disposed between the TV module and a power supply unit, the power switch being switched under the control of the MSP to turn on/off the TV module.

3. (Previously Presented) The TV phone recited in claim 1 further comprising an antenna for receiving or transmitting a radio-frequency, electromagnetic signal; and a Radio Frequency Switch (RFSW) disposed between the TV module and the MFRU, the RFSW allowing the antenna to be connected to both the TV module and the MRFU in response to the establishment of the TV mode of the MSP, and allowing the antenna to be connected to only the MRFU in response to the establishment of the phone mode of the MSP.

4-7. (Cancelled)

### EVIDENCE APPENDIX

There is no evidence submitted pursuant to 37 C.F.R. 1.130, 1.131, 1.132 or entered by the Examiner and relied upon by Appellant.

### RELATED PROCEEDINGS APPENDIX

There are no known decisions rendered by a court or the Board in any proceeding identified pursuant to paragraph (c)(1)(ii) of 37 C.F.R. 41.37.